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UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/077,029

05/18/98

KIMURA

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TM02/0509

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EXAMINER

MALINOWSKI, W

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PO BOX 19928
ALEXANDRIA VA 22320

ART UNIT

PAPER NUMBER

2164

DATE MAILED:

05/09/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.

09/077,029

Applicant(s)

KIMURA ET AL.

Examiner

Walter Malinowski

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 20-31 and 33-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 32, and 47-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed September 15, 2000, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein regarding JP 03 033824 has not been considered.

The information disclosure statement filed September 15, 2000, fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein regarding GB 2 297 647, US 4 007 462, and JP 03 192334 has not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19, 47/2-47/19, 47/32, 48/2, 48/3, 48/5 – 48/10, 48/12 – 48/19, 49/7, 49/8, 49/11, 49/13, and 50-52 rejected under 35 U.S.C. 102(b) as being

clearly anticipated by Yuichi, European Patent No. 6 281 917, or Masayuki, European Patent No. 7 134 288.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19, 47/2-47/19, 47/32, 49/7, 49/8, 49/11, 49/13, and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiba et al. (Shiba), U.S. Patent No. 6,180,294.

Shiba discloses a display device having features which have a repellency different from the peripheries of the feature and upon which an optical material is placed.

Shiba does not teach that the differences in repellency are substantially different.

It would have been within the purview of one of ordinary skill to adjust the different repellencies to achieve the desired containment of the optical material.

Projections are well known in the liquid crystal display art and, to better confine the liquid material, would have been obvious to use.

Fluorescent color filter materials are well known in the liquid crystal display art and, to enhance the image quality, would have been obvious to use.

Claims 48/2, 48/3, 48/5 – 48/10, and 48/12 – 48/19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiba, in view of Kim, U.S. Patent No. 5,274,481, or Akins, U.S. Patent No. 5,399,390, as applied to Claims 1-19, 47/2-47/19, 47/32, 49/7, 49/8, 49/11, 49/13, and 50-52 above.

Shiba discloses an optical material arranged at predetermined positions but does not disclose the optical material is liquid crystal.

Although Shiba discloses color filters, since liquid crystal is responsive to hydrophilicity, liquid crystal would be expected to be positioned using the same techniques.

Kim and Akins disclose a liquid crystal display with liquid crystal material as the optical material between features.

The features of Kim and Akins would have contained the liquid crystal material.

Therefore, it would have been obvious to use liquid crystal, as taught by Kim or Akins, in the device of Shiba.

Response to Arguments

Applicant's arguments filed February 20, 2001, have been fully considered but they are not persuasive.

Responsive to applicant's amendments, a new reference, Shiba, has been cited.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Malinowski whose telephone number is (703) 308-3172. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703) 308-1065. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5401 for regular communications and (703) 308-5355 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

wjm
May 4, 2001

Walter Malinowski
Walter J. Malinowski
Primary Examiner
Technology Center 2800